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# ATTACHMENT H-1 PCAPP EDS JOB TITLES AND DESCRIPTIONS

1

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PCAPP EDS JOB TITLES AND DESCRIPTIONS 2 3 With the exception of the Joint Project Manager Elimination (Provisional) (JPM E (P)) Site Manager, job 4 titles and descriptions presented below pertain to Edgewood Chemical Biological Center (ECBC) 5 personnel who will operate the EDS units at the PCAPP EDS site. 6 7 8 **JPM E (P) Site Manager:** Responsible for the programmatic control and authority of EDS operations; 9 works in conjunction with the PCAPP EDS Manager; acts as interface with PCD, Materiel Assessment 10 Review Board (MARB), Treaty, JPM E (P) management for PCAPP EDS operations. 11 12 Minimum Qualifications/Experience: Bachelor's degree in related field, minimum of 2 years planning, operating, or overseeing chemical agent or hazardous waste operations. Must have experience managing 13 multi-disciplinary teams including engineers, scientists, safety professionals, environmental professionals, 14 public affairs, and resource management. 15 16 17 **PCAPP EDS Manager:** Responsible for executing and directing all PCAPP EDS site operations; responsible for overall site safety and environmental compliance; first line management/supervision; 18 19 responsible for supply orders and maintenance issues; overall site logistics; may substitute for Site Safety 20 and Health Officer, Environmental Officer, or Quality Assurance Coordinator. 21 22 **Minimum Qualifications/Experience:** 3 years of experience managing operational personnel or 3 years 23 of experience with chemical handling operations. 24 25 **PCAPP EDS Crew Chief:** Responsible for day-to-day operation of an EDS unit; responsible for overall use of an EDS Crew and shared use of the Personnel Decontamination Station (PDS) crew; responsible 26 27 for coordinating with other EDS crews to ensure synergistic operations; responsible for safety, 28 environmental compliance and quality assurance for specific EDS unit; reviews and certifies limiting 29 condition of operation status; has maintenance responsibility for EDS unit; and provides data to PCAPP 30 EDS Manager on logistics for each EDS unit. 31 32 Minimum Qualifications/Experience: High School diploma or GED; 3 years of experience managing operational personnel; 3 years of experience with chemical handling operations. 33

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1	PCAPP EDS Site Safety and Health Officer: Responsible for overall PCAPP EDS site safety and
2	health concerns; reviews limiting conditions of operations, checklists for accuracy, and monitors heat and
3	cold stress. Is point-of-contact for accident and chemical agent reports; reports to the PCAPP EDS
4	Manager.
5	
6	Minimum Qualifications/Experience: Bachelor's degree in related field and/or minimum 2 years of
7	experience managing safety and occupational health programs; experience with OSHA safety compliance
8	federal and state requirements.
9	
10	<b>PCAPP EDS Training Director:</b> Responsible for personnel training, records, certifications, and
11	updates; ensures that personnel are properly trained in operating the EDS units according to Federal,
12	State, Army, and local environmental regulations and permits/permit requirements; coordinates
13	continuing training; maintains records; and identifies training resources to meet training requirements.
14	
15	Minimum Qualifications/Experience: Bachelor's degree in related field and/or minimum 2 years of
16	experience in training programs with emphasis on hazardous waste management and treatment, storage,
17	and disposal facility (TSDF) operations.
18	
19	<b>PCAPP EDS Environmental Officer:</b> Responsible for PCAPP EDS site compliance to environmental
20	permits; responsible for hazardous waste documentation and labeling; reports to PCAPP EDS Manager.
21	
22	Minimum Qualifications/Experience: Bachelor's degree in the Sciences or Engineering and/or 3 years
23	of experience with hazardous material handling under Federal and State laws; RCRA hazardous waste
24	training required.
25	
26	<b>PCAPP EDS Quality Assurance Coordinator:</b> Responsible for verifying compliance with the quality
27	assurance plan and site-specific monitoring plan; reviews and certifies data prior to submitting data to
28	Data Management System (DMS)/INACCMO; monitors site to ensure proper procedures are followed
29	prior to operation; assists in review of near real-time (NRT) CHROM-NET™ data; reports to PCAPP
30	EDS Manager.
31	
32	Minimum Qualifications/Experience: High School diploma or GED; 3 years of experience with quality
33	assurance and quality control programs.

1 PCAPP EDS Chemical Operator: Responsible for chemical warfare materiel (CWM) chemical 2 treatment activities and processes and for hazardous waste handling. Cross-trained to multiple job 3 capabilities. 4 Minimum Qualifications/Experience: High School diploma or GED; experience with chemical 5 handling and operations. 6 7 8 PCAPP EDS Explosives Operator: Responsible for explosives operations, including CWM initial unpack and explosives handling and preparation. Assists in hazardous waste handling. Cross-trained to 9 10 multiple job capabilities. 11 Minimum Qualifications/Experience: High School diploma or GED; successful completion of the 12 13 Defense Ammunition Center Courses AMMO-45 and AMMO-61; trained in the safe handling, 14 placement, and operation of explosives, explosive components, and firing system for the JPM E (P) 15 system to be operated. 16 17 **PCAPP EDS Maintenance Operator:** Responsible for maintenance activities and processes for EDS units. Also, conducts preventive maintenance measures on the EDS units. 18 19 Minimum Qualifications/Experience: High School diploma or GED; experience with maintenance 20

21

activities and processes.

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1	<b>H-2 TRAINING IMPLEMENTATION</b> [6 CCR 1007-3 § 264.16(a)(1), (b), (d)(4), and (e)]
2	
3	PCAPP EDS site personnel will be required to complete training specific to their job position within
4	6 months of assignment at their respective sites or to a new assignment at the respective site and will not
5	work unsupervised until all relevant training has been successfully completed and documented.
6	Furthermore, site personnel must complete the requisite classroom and on-the-job training prior to
7	engaging in any hazardous waste operations. For PCAPP EDS operators, this includes the PCAPP EDS
8	site Workforce Qualification Program.
9	
10	All training will be based on analyses that identify the specific tasks to be performed by each job position
11	as well as identify the knowledge, skills, and attitudes required to perform those tasks. Each training
12	course will have learning objectives based on analysis of the tasks required to operate the EDS. Special
13	emphasis will be placed on personnel safety and environmental compliance in every training module.
14	Training aids, such as handouts, reference materials, models, or actual pieces of equipment, will be used
15	as appropriate. Specialized vendor or commercially provided training may be required in some areas.
16	
17	Written test and/or practical demonstration of skills (includes hands-on) will be administered during all
18	courses to test the students' mastery of learning objectives to established job performance standards.
19	Certificates of completion will be issued to all students who demonstrate proficiency of the course
20	materials. At this point, the student will be considered qualified and may work under supervision.
21	Individual employee training will be documented after completion of each course.
22	
23	Hands-on training of the EDS will be administered to test student's mastery of operations while being
24	observed by a supervisor. When the supervisor has determined that the student has met all training
25	requirements, the certifying official will certify the student, who will then be able to perform EDS
26	operations (as applicable) unsupervised. The certification will be placed in the student's training record
27	verifying that the student can work unsupervised.
28	
29	Courses specific to the EDS will provide a thorough background in basic design, proper operation, and

maintenance of the systems. General course descriptions are contained in Attachment H-2.

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#### Training Records

2	
3	

1

Training records for the PCAPP EDS site personnel will be maintained, readily available, and include, at a minimum:

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• Job title for each position that is related to PCAPP EDS site's hazardous waste management operations and activities, and the name of each employee filling the position

8 9

7

• Job description specifying duties for each position, minimum qualification required to fill the position, and required training for the position

10 11 12

• Description of the type and amount of introductory and continuing training that will be given to each employee

131415

• Date each employee started working at the PCAPP EDS site and termination date

16 17

• Course enrollment, attendance, and successful completion information, including certifications

18 19

20

• Copies of course materials and instructional methods (outlines, schedules, instructional techniques, and materials).

- 23 All training records and documentation on current PCAPP EDS site personnel will be kept until closure
- 24 of the PCAPP EDS site. Training records on former PCAPP EDS site personnel will be kept for at least
- 25 3 years from the date last worked at the respective site.

1	H-1 OUT	<b>FLINE OF TRAINING PROGRAM</b> [6 CCR 1007-3 § 100.41(a)(12) and § 264.16(a)(1)]
2		
3	Training will	consist of both introductory and continuing training for supervisors, operators, maintenance
4	personnel, an	nd other personnel involved in PCAPP EDS site waste management operations. Introductory
5	training will	include classroom and hands-on training consisting of process demonstrations, equipment
6	operation, an	nd hands-on experience with hazardous waste procedures and instruction in emergency
7	response. Co	ontinuing training will include safety briefings, procedure reviews, and annual refresher
8	courses (for	example, 8-hour annual refresher for hazardous waste operations training). The training for
9	PCAPP EDS	personnel will incorporate training required by Resource Conservation and Recovery Act
10	(RCRA), OS	HA, and the U.S. Army (for chemical agent topics).
11		
12	PCAPP EDS	personnel will receive training on the following topics commensurate with their job duties
13	and responsi	bilities:
14		
15	•	Hazardous Waste Operations and Emergency Response (HAZWOPER) (per
16		29 CFR 1910.120)
17		
18	•	Communications and equipment alarm
19		
20	•	Hazard communication (per 29 CFR 1910.1200)
21		
22	•	Hazardous waste management procedures, including use, inspection, repair, and
23		replacement of emergency and monitoring equipment; container management; labeling
24		and weekly inspections; waste sampling and waste determinations; management of solid
25		and liquid wastes; recordkeeping requirements and spill reporting for releases
26		
27	•	Contingency plans and emergency response procedures
28		
29	•	Protective clothing and equipment
30		
31	•	Shutdown operations (normal and emergency)

1	Response to groundwater contamination
2	
3	Medical surveillance.
4	
5	Operating personnel will already be trained in cardiopulmonary resuscitation (CPR)/automated external
6	defibrillator (AED)/first aid. Also, key parameters for automatic waste feed cutoff systems are not an
7	applicable topic as the EDS unit does not have any automatic waste feed mechanisms.
8	
9	<b>H-1a Job Titles and Duties</b> [6 CCR 1007-3 § 264.16(d)(1) and (d)(2)]
10	
11	Job titles and duty descriptions of PCAPP EDS site personnel are provided in <b>Attachment H-1</b> .
12	
13	H-1b Training Content, Frequency, and Techniques [6 CCR 1007-3 § 264.16(a)(3), (c), and (d)(3)]
14	
15	H-1b(1) EDS Operators
16	
17	A qualification certification program has been established by the U.S. Army for the EDS operators, titled
18	EDS Work Force Qualification Certification Program. The EDS operators will be responsible for
19	conducting and performing hazardous waste operations at the PCAPP EDS site.
20	
21	Introductory training is conducted using a variety of training techniques, including classroom instruction,
22	demonstrations, drills, and hands-on exercises. A proficiency demonstration (for example, written test,
23	hands-on demonstration, etc.) is required to verify trainee comprehension of the subject material.
24	
25	Supervised hands-on training will take place at the PCAPP EDS site. Evaluations will be administered by
26	the supervisor or designated representative and performance checklists will be used to verify competence
27	on the subject task.
28	
29	Continuing training will supplement initial training and will be used to demonstrate continued proficiency
30	in their assigned job areas. Continuing training will include required annual refresher training (for
31	example, 8-hour annual HAZWOPER refresher training), as well as review of initial training topics as
32	necessary and will also consist of a combination of classroom instruction, drills, and evaluated hands-on
33	training. Operators must also score a minimum of 80 percent on a written exam, which is reported to the
34	Joint Project Manager Elimination (Provisional) (JPM E (P)).

The training program will be reviewed and updated by the Training Director whenever there are changes in regulations, waste types handled or managed, design or operation, waste management equipment or techniques, or Contingency Plan procedures to maintain compliance with permit and regulatory

4 requirements. The training program also may be updated at the request of the operator.

5

6

#### H-1b(2) PCAPP EDS Site Visitors, Inspectors, and Non-routine Workers

7

- 8 During PCAPP EDS site operations, certain personnel may be present who will not actively or routinely
- 9 engage in hazardous waste treatment or handling operations. These personnel may be visitors, such as
- 10 regulatory agency inspectors; Chemical Weapons Convention (CWC) inspectors/observers; independent
- contractor data collectors/observers/inspectors; and non-routine workers such as electricians and
- engineers to repair equipment or perform structure repairs. These types of personnel will, at a minimum,
- 13 receive the General Site Orientation Briefing. In addition, these personnel may also attend a daily safety
- briefing as applicable and other training on the EDS operations, depending on the level of participation or
- work activity to be conducted.

16 17

### **H-1c** Training Director [6 CCR 1007-3 § 264.16(a)(2)]

18

- 19 A Training Director for EDS operators will be responsible for training. The Training Director will be
- 20 knowledgeable in training principles and practices, all aspects of the EDS operations, and knowledgeable
- and experienced in hazardous waste management. A Training Director will be selected prior to beginning
- 22 PCAPP EDS site operations.

2324

The responsibilities of the Training Director will be to:

2526

 Ensure personnel are properly trained in the safe operation of the EDS unit in accordance with Federal, State, Army, and local environmental regulations, including the Pueblo Chemical Depot (PCD) RCRA permit, EDS modification/module.

2930

27

28

 Coordinate continuing training as necessary to inform PCAPP EDS site personnel of new procedures, provide refresher training, and provide training for new personnel.

32

31

• Identify and review vendors and other training resources to meet training requirements.

3435

Maintain training records in accordance with 6 CCR 1007-3 § 264.16(d) and (e).

1	<ul> <li>Ensure EDS site personnel are trained in hazardous waste management and Contingency</li> </ul>				
2	Plan implementation, including emergency procedures.				
3					
4	<ul> <li>Ensure EDS site personnel receive training appropriate to their positions.</li> </ul>				
5					
6	Training Staff				
7					
8	All instructors will be knowledgeable in the areas in which they will be teaching. Subject matter experts				
9	(SMEs) will be used as they possess the knowledge, training, and experience in a subject content area.				
10	For example, munition handling and safety personnel are part of training material development as well a				
11	part of actual training, as applicable.				
12					
13	<b>H-1d</b> Relevance of Training to Job Position [6 CCR 1007-3 § 264.16(a)(2)]				
14					
15	All personnel will be trained in the duties and responsibilities relevant to their job position as it relates to				
16	hazardous waste operations. Course requirements have been tailored to the subject areas and levels of				
17	detail appropriate for each position. Training (initial and continuing) relevant to each PCAPP EDS site				
18	job position is presented in <b>Tables H-1-1</b> <sup>1</sup> and <b>H-1-2</b> .				
19					
20	<b>H-1e</b> Training for Emergency Response [6 CCR 1007-3 § 264.16(a)(3)]				
21					
22	Emergency response training will be provided to all PCAPP EDS site personnel relevant to their				
23	positions. At a minimum, the training has been designed to ensure that site personnel are able to respond				
24	effectively to emergencies by becoming familiar with site emergency procedures, equipment, and				
25	systems, including:				
26					
27	<ul> <li>Procedures for locating, using, inspecting, repairing, and replacing site emergency and</li> </ul>				
28	monitoring equipment				
29					
30	<ul> <li>Location and use of communications and equipment alarms</li> </ul>				
31					
32	<ul> <li>Response to emergency situations (e.g., fires, explosions, releases)</li> </ul>				

All tables are located at the end of this section.

1	•	Who to inform in the event of an emergency
2		
3	•	Response to groundwater contamination incidents
4		
5	•	Shutdown of operations and evacuation.
6		
7	Course descript	tions are provided in <b>Attachment H-2</b> , Course Descriptions.

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Table H-1-1. PCAPP EDS Personnel Introductory Training Requirements

			Training Courses		
Job Title	General Site Orientation Briefing	Safety, Health, and Environmental Training	EDS Operating System Course	EDS Maintenance Course	EDS System Manager's Training
JPM E (P) Site Manager <sup>a</sup>	X	X			X
PCAPP EDS Manager <sup>a</sup>	X	X			X
PCAPP EDS Crew Chief	X	X	X		
PCAPP EDS Site Safety and Health Officer	X	X			
PCAPP EDS Environmental Officer <sup>a</sup>	X	X			
PCAPP EDS Quality Assurance Coordinator <sup>a</sup>	X	X			
PCAPP EDS Chemical Operator	X	X	X		
PCAPP EDS Explosives Operator	X	X	X		
PCAPP EDS Maintenance Operator	X	X		X	
Visitors and Non-routine Workers <sup>b</sup>	X				

#### Notes:

5 6

8

10 EDS = Explosive Destruction System

11 JPM E (P) = Joint Project Manager Elimination (Provisional) 12 PCAPP = Pueblo Chemical Agent-Destruction Pilot Plant

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<sup>&</sup>lt;sup>a</sup> Must take 8-hour HAZWOPER Supervisor Training.

b Visitors include regulatory agency personnel and other personnel. Non-routine workers will already hold a certificate in the required OSHA HAZWOPER training for RCRA treatment, storage, and disposal facilities (TSDFs).

# 1 2

# Table H-1-2. PCAPP EDS Personnel Minimum Continuing Training Requirements

	Training Courses		
Job Title	General Site Orientation Briefing	Safety, Health, and Environmental Training	Specific Refresher Training
JPM E (P) Site Manager	X	X	X
PCAPP EDS Manager	X	X	X
PCAPP EDS Crew Chief	X	X	X
PCAPP EDS Site Safety and Health Officer	X	X	X
PCAPP EDS Environmental Officer	X	X	X
PCAPP EDS Training Director	X	X	
PCAPP EDS Quality Assurance Coordinator	X	X	X
PCAPP EDS Chemical Operator	X	X	X
PCAPP EDS Explosives Operator	X	X	X
PCAPP EDS Maintenance Operator	X	X	X

Notes:

EDS

3 4 5 6 7 8 Explosive Destruction System Joint Project Manager Elimination (Provisional) Pueblo Chemical Agent-Destruction Pilot Plant JPM E (P) = **PCAPP** 

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1		SECTION H			
2	PERSONNEL TRAINING				
3	[6 CCR 1007-3 § 100.41(a)(12) and § 264.16]				
4					
5	This hazardou	s waste training program will provide Pueblo Chemical Agent-Destruction Pilot Plant			
6	(PCAPP) Exp	losive Destruction System (EDS) site operating personnel with the necessary knowledge			
7	and skills to p	erform hazardous waste duties safely and efficiently, and will ensure that hazardous			
8	activities are o	conducted in an environmentally sound manner. The purpose of the training program is to			
9	prepare EDS	operating personnel for mission responsibility, with emphasis on reducing potential risks			
10	that may threa	ten human health or the environment. This will be accomplished by ensuring that			
11	personnel han	dling hazardous waste are thoroughly familiar with, and can properly perform, their			
12	assigned dutie	es and responsibilities. In addition to providing training in the mechanics of the EDS			
13	operations, the	e training program will provide personnel with an understanding of the EDS operations,			
14	including safe	ty, environmental, and emergency response operations. This training description focuses on			
15	the training re	equirements and implementation for the EDS operators as these personnel are responsible for			
16	conducting op	perations and performing hands-on hazardous waste operations.			
17					
18	In general, EI	OS training will meet the requirements of the Colorado Hazardous Waste Regulations,			
19	6 CCR 1007-3 § 100.41(a)(12) and § 264.16 by:				
20					
21	•	Providing both initial and continuing training specific to the various hazardous waste			
22		management positions			
23					
24	•	Ensuring that personnel complete their training program within 6 months of their			
25		assignment to the PCAPP EDS site or to a new position associated with the EDS			
26		operations			
27					
28	•	Ensuring that personnel do not work unsupervised at EDS operations until they are			
29		certified under the EDS Work Force Qualification Certification Program			
30					
31	•	Ensuring the training program is directed by qualified personnel trained in hazardous			
32		waste management procedures			
33					
34	•	Providing training that enables EDS personnel to respond effectively to emergencies			

1	•	Providing annual and periodic reviews of applicable training and ensuring EDS operating
2		personnel participation
3		
4	•	Maintaining required training records and documentation
5		
6	•	Ensuring personnel do not engage in waste management operations until they have
7		completed the requisite health and safety training [Occupational Safety and Health
8		Administration (OSHA) 29 CFR 1910.120].
9		
10	The training pr	ogram will provide both initial and continuing training relevant to an employee's position
11	and applies to p	personnel who manage hazardous waste, including but not limited to, personnel who
12	handle, move, j	perform maintenance on, and operate hazardous waste management equipment or
13	supervise those	who do. Per 6 CCR 1007-3 § 264.16(c), annual training requirements must be completed
14	within 13 mont	hs of previous annual or initial training.
15		
16	Section H-1 de	escribes training program requirements specific to personnel. Section H-2 describes
17	implementation	n of the training program.

# ATTACHMENT H-2 COURSE DESCRIPTIONS

1

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1 **ATTACHMENT H-2** COURSE DESCRIPTIONS 2 3 Training courses will provide the most efficient and effective means of accomplishing training for a wide 4 range of job descriptions at the PCAPP EDS site. A description of each briefing, training, or course 5 follows. 6 7 8 **General Site Orientation Briefing** 9 10 This briefing describes general site operations and covers the following topics: hazard communications (HAZCOM), general security, use of personal protective equipment (PPE), and emergency response, 11 12 alarms, and evacuation. 13 Safety, Health, and Environmental Training 14 15 16 This training is provided by various sources/vendors and provides information on the following topics: 17 18 Toxic Aid 19 20 Site decontamination and other contingency measures 21 RCRA/Comprehensive Environmental Response, Compensation, and Liability Act 22 23 (CERCLA) requirements, permits, documents, recordkeeping, waste management, etc. 24 25 CWM handling 26 Hazardous waste handling (includes regulations and site-specific requirements, as 27 28 applicable) 29 30 **PPE** 31 32 40-hour HAZWOPER training 33 8-hour HAZWOPER supervisor training 34

1	8-hour annual HAZWOPER refresher training
2	
3	<ul> <li>Medical surveillance and requirements</li> </ul>
4	
5	<ul> <li>Hazardous materials transportation (requirements under Department of Transportation</li> </ul>
6	[DOT]).
7	
8	Not all topics listed will be applicable to all positions.
9	
10	EDS Operating System Course
11	
12	This course provides an overview of the EDS operations and addresses the components and operation of
13	the EDS system including: trailer, electrical systems, treatment vessel, hydraulic system, helium leak
14	detection, waste transfer system, and reagent supply system. This course covers the use and application
15	of Standing Operating Procedures (SOPs) that will be used to operate the EDS and addresses routine
16	operational procedures as well as procedures for unusual events. Explosives operators receive additional
17	training on EDS explosives operations, CWM initial unpack, explosive charge placement, and fireset
18	operation.
19	
20	EDS Maintenance Course
21	
22	This course presents a maintenance overview and provides specific training on maintenance of the EDS
23	systems, as well as preventive maintenance measures.
24	
25	EDS-Specific Refresher Training
26	
27	This course provides system-specific operating system and maintenance refresher training on an annual
28	basis and will be divided into three modules: operating systems, system maintenance, and explosive
29	operators' training. The specific modules completed will depend on the student's job description and
30	work experience.

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# 1 EDS System Manager's Training

- 3 This course familiarizes students with the EDS components, subsystems, operating parameters, and site
- 4 operations; also includes PCAPP EDS Command Post operations, responsibilities, and regulatory and
- 5 documentation requirements.

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